This presentation is for use by staff who have attended the teaching and assessing hand hygiene programme within Cork Kerry Community Healthcare. For all queries contact the infection control nurse for your area at 021 4923148
Before you start give each person a copy of the hand hygiene leaflet and the hygiene knowledge assessment form, explaining that this is what they will be assessed on.

The presentation will provide
• an overview of the principles of hand hygiene,
• a practical demonstration of hand hygiene by you the teacher
• Learners will be then given an opportunity to carry out hand hygiene
• Learners can check their hand hygiene technique and glove removal technique using glow germ and the hand inspection cabinet where available.
• A time for completion of the knowledge assessment form and for assessment of technique can then be agreed between you and the learner.
Hand Hygiene Programme

- As part of the hand hygiene programme each person should
  - Receive the “Hand Hygiene for Staff” HSE Leaflet for Long Term Care and Community Services 2014
  - Complete the knowledge assessment & competency form
  - Have their hand washing technique and use of alcohol hand rub products assessed
  - Be updated & reassessed every 2 years (minimum)

If not already given ensure all staff have the leaflet and assessment form,

Objectives of the Programme are
  - To educate all staff in hand hygiene
  - To have 2 yearly education and assessments of hand hygiene
  - To have written documentation
  - To comply with local protocol

This will aid compliance with
  - HIQA Standards
  - HSE 2015 “Guidelines for Hand Hygiene in Irish Healthcare Settings” recommendations
What is Hand Hygiene?

- Using alcohol hand rubs to kill germs (microorganisms) on our hands
- Cleaning your hands by washing with soap and water to remove dirty, dead skin cells and germs

Using soap & water we physically remove dirty, dead skin cells and microorganisms from our hands

Using alcohol hand rub (AHRs) will kill some of the germs that are on our hands

In healthcare settings and when delivering healthcare it is recommended that AHRs are used the majority of the time we need to carry out hand hygiene

Recommended that 80% of hand hygiene carried out in healthcare should with AHR
Why we clean our hands

- To protect service users from harmful germs on your hand
- To protect yourself from harmful germs
- To provide safe care

Failure to carry out hand hygiene may lead to

- Transmission of infectious diseases i.e. gastroenteritis
- Healthcare Associated Infection (HCAIs) by not carrying out hand hygiene before attending to catheter care
- Spread of bugs which are resistant to antibiotics i.e. MRSA

Referring to the leaflet

As a healthcare or social care worker in the course of your work you will have contact with residents/service users/patients who may be more vulnerable to infection, may have invasive devices, you will be providing hands on care, intimate care and may be dealing with body fluids therefore hand hygiene is important to prevent the transmission of infection for the residents/service users/patients and yourself.
Microbiology- What are your hands carrying?

**Resident Microorganisms**
- Deep seated – in sweat glands, beneath finger nails
- Difficult to remove
- Part of the body's natural defences
- Can be associated with infection following surgery or invasive procedures

**Transient Microorganisms**
- Superficial
- Transferred with ease to and from hands
- Easily removed with good hand hygiene
- Can be an important source of cross infection

Referring to the leaflet
Our hands carry two types of microrgansims (bugs)—
1. Resident - which are our own, required for our health and generally do not cause a problem when people are well.
2. Transient – the bugs we pick up and can pass to others, easily removed with good hand hygiene but an important source of cross infection

Hand hygiene with soap and water will be sufficient in most situations, in hospitals and healthcare settings you will see that AHR is used more often as it is quicker to use and kills germs.
Health care associated infection – infections which occur as a result of healthcare interventions/treatments in any healthcare setting – hospitals, long term care, primary care, home care

Risk is greater in hospitals but present in all settings healthcare is given

Further information in relation to HCAI in the long term care setting can be found at www.hpsc.ie search HALT

Relevant articles can be provided on request by contacting your local IPCN
Many actions will assist in preventing and controlling infection.

Hand Hygiene is the single most important thing individuals can do to prevent infection.

Many actions will assist in infection prevention and control e.g. immunisation, hygiene measures etc
individual responsibility can be emphasised in relation to hand hygiene.
When must we clean our hands?

Examples of Indications for hand hygiene in any setting

**Before**
- Commencing work
- Handling/preparing food.
- Eating or assisting a person to eat

**After**
- Using the bathroom or assisting a person in the bathroom.
- Nose blowing
- Handling items likely to be contaminated i.e. raw food, bins, cleaning equipment.
- Handling pets, cleaning pets cages or handling cages feeding utensils.
- Outside activities
- Smoking
- When hands are visibly dirty.

Outlined in this slide are routine times we need to wash our hands, often habits from childhood or our perception of when hands are ‘dirty’ or when we think there is a risk.
When providing healthcare, the risk of infection increases, therefore having clean hands is critical to providing safe care. Where healthcare is the WHO Moments for Hand hygiene apply specifically where healthcare is delivered. Refer to posters and Guidelines on Infection Prevention and Control for Community & Disability Service (HSE South, 2017) Section 3 Standard Precautions for details of the moments for hand hygiene.

You may be happy to use a poster or the leaflet when going through the moments for hand hygiene, the slides are as an additional support.
Notes for Hand Hygiene Assessors who have attended the Teaching & Assessing Hand Hygiene Programme

Moment 1 - Before Touching the Resident

- Before touching the resident

When: clean the hands before touching the resident/client

Why: to protect the resident/client from harmful micro-organisms carried on the HCW hands

Examples:
- helping a resident/client to get washed or dressed
- Prior to changing incontinence wear
- taking pulse, blood pressure, examination of skin, abdominal palpation
Moment 2 - Before a Clean/Aseptic Procedure

When: clean the hands immediately before performing an aseptic or clean procedure.

Why: to protect the resident/client from harmful micro-organisms, including the residents' clients own, from entering his/her body.

Examples:
- Oral care, giving eye drops, suctioning
- Skin lesion care, wound dressing, subcutaneous injection
- Urinary catheter care & insertion
- Accessing, commencing enteral feeding system
- Preparation of medication, or dressing
- Taking samples, blood, urine

Before clean or aseptic procedure
Notes for Hand Hygiene Assessors who have attended the Teaching & Assessing Hand Hygiene Programme

**Moment 3 - After Body Fluid Exposure Risk**

When: clean the hands immediately after an exposure risk to bodily fluids (and after glove removal)

Why: to protect the HCW and the healthcare environment from harmful micro-organisms

Examples:
- clearing up urine, faeces, vomit, handling waste (dressings, tissues, incontinence pads),
- cleaning of contaminated and visibly soiled material or areas (bathroom, commodes)
- oral care, giving eye drops, suctioning
- skin lesion care, wound dressings, subcutaneous injection
- taking blood, CSU, handling emptied urinary catheters.
Notes for Hand Hygiene Assessors who have attended the Teaching & Assessing Hand Hygiene Programme

Moment 4 - After Touching the Resident

**When**- clean the hands after touching the resident/client when leaving their side

**Why**- to protect the HCW and the healthcare environment from harmful micro-organisms

**Examples**
- After helping a resident get washed, get dressed,
- After taking pulse, blood pressure,
**Moment 5 - After Touching the Residents Surroundings**

*When-* clean hands after touching any object or furniture in the residents/clients immediate surroundings when leaving even if the resident/client has not been touched

*Why-* to protect the HCW and the healthcare environment from harmful micro-organisms

*Examples*
- After clearing the bedside table
- After bed making

- After touching a resident environment
Moments 2 & 3 are usually involving high risk of infection & critical sites

Therefore essential Moments for Hand Hygiene

You might ask the learner for examples

Moment 2 – Handling a device- urinary catheter, before wound care, eye care, oral care, before blood glucose monitoring etc

Moment 3 – after contact with body fluids – after emptying a urinary catheter, after blood glucose monitoring, after oral care, after removing gloves
In 2012 the WHO produced a document looking at the evidence for hand hygiene in setting outside of acute care where healthcare is delivered- Residential Care Facilities, Long term care, home.

Where residents are semi independent and live in a community they will have shared living space or rooms and will move about within the facility. Therefore there is no distinct difference between the patient and healthcare zone.

The **patient zone** will only apply where the resident is cared for exclusively in a dedicated space with dedicated equipment e.g. bedside.

In the home setting the patient and their home is considered the **patient zone**.

In out patients the patient him/her self is considered the **patient zone** as the space and equipment used is not exclusively dedicated to the patient for any prolonged period.
Social Settings within Long Term Care Facilities

- In shared activities areas e.g. dining room, day room etc. direct care or clinical procedure do not routinely take place

- In common areas where residents gather, the environment is shared by many people.

- To reduce spread of organisms, staff and residents should clean their hands before beginning an activity i.e. before dining

- If staff provide any healthcare where shared activities occur, the 4 moments for Hand Hygiene are to be followed.
In Healthcare setting in the clinical areas sinks of must be of appropriate standard as in the picture. Where sinks are not of this standard are not in place consult with infection control

In healthcare settings include the importance of only using the hand hygiene sinks designated for hand hygiene, clinical hand washing sinks must not be used for washing of equipment or disposal of water after washing residents.
Where hand hygiene is required before, during or after care activities it should be carried out at the point where that care is delivered.

Hand hygiene around food handling and food prep should be carried out in the kitchen area.
Ask the learners do they think they are ready to carry out hand hygiene?
Invite them to look at their own hands.

Issues re nail varnish, jewellery will need to be addressed in your local dress code /uniform policy, and how breaches are dealt with should be outlined in the hand hygiene protocol.

The evidence to support is on the HSEland presentation on Hand Hygiene and in the pack provided at the Hand Hygiene programme.

Recommendations from the National Guidelines on Hand Hygiene in the Irish Healthcare setting (2015) include

When delivering care
• Bare the wrists- short sleeved top or rolled up sleeves
• Remove all wrist and hand jewellery (except a flat band).
• Keep fingernails short
• Do not wear nail varnish, false nails or nail enhancements
• Cover cuts and abrasions with a waterproof dressing
Where a person has diarrhoea this should be considered infectious, in the community we will often not know the bug, therefore handwashing with soap and water is always recommended.
This slide shows the areas most frequently missed and why the six step technique is recommended.

Often a person who is right handed is less likely to wash the back of their right hand using their left hand.
Handwashing Technique

- Remove jewellery and roll up sleeves.
- Wet hands under running water
- Apply one shot of soap work up a lather
- Cover all surfaces using six step technique
- Rinse hands under running water
- Pat hands dry with paper towel

You can use just the poster when going through technique
Use an AHR to demonstrate technique if the sink isn’t convenient at this stage.
You will need to use a sink to demonstrate hand washing and to assess the persons technique
Mention the importance of wetting hands thoroughly as this creates a barrier between the skin and the soap
One shot of soap is sufficient to create a lather
Each step is carried out a couple of times approx 5 times , briskly.
Physical action is how hands are cleaned, as opposed to using alcohol which has a chemical action.
Step 5 often causes difficulties , reminding people of how much they do with their fingertips highlights the importance of cleaning the finger tips.
The wrist are often missed , emphasise the importance in relation to glove usage, when taking off gloves risk of contaminating around the wrist.
Emphasise the importance of rinsing off all the soap as residue of soap can cause drying .
Importance of drying thoroughly by patting with a good quality paper towels
Alcohol based hand rubs.

The use of AHR is the preferred means of hand hygiene for healthcare settings and where healthcare is delivered and will also be useful where hand hygiene facilities are limited in community settings.

You can use the poster or the next few slides.
When using Alcohol Hand Rubs

- Use on visibly clean hands
- Apply an adequate amount to cover the hands
- Cover all surfaces once using the 6 step technique, then
- Continue rubbing using the technique until hands are completely dry
- Duration 20-30 secs
Alcohol Hand Rub

Do not

✗ Use AHR if hands are physically dirty
✗ Use AHR after caring for a person with diarrhoea.
✗ Place AHR dispensers adjacent to electrical fittings or direct heat
✗ Store AHR near sources of high temperatures as AHR is flammable.

Remember to avoid using AHR after hand washing.

Emphasis the importance of safety in your setting – consider any risk of ingestion, fire, safe storage.

You can also refer to the Guidelines on Infection Prevention and Control for Community & Disability Service (HSE South, 2017) Section 3 for more information.
Time Management

Hand washing up to 1 ½ minutes for entire procedure

Alcohol hand rubs 20-30 secs, can be done on the move.
Draw the learners attention to the leaflet Hand Care for Health Care Staff and that further information on hand care is in the Guidelines on Infection Prevention and Control for Community & Disability Service (HSE South, 2012) Section 3.

How staff access Occupational Health should the need arise could be discussed.

Points to consider
Caring for your hands to prevent dry, cracked skin.
Prolonged contact with water softens the skin of the hands and may lead to skin irritation.

Skin is the main barrier to infection therefore it is important to care for your hands by

- Covering all cuts and abrasions.
- Using a moisturiser regularly.
- Avoiding prolonged or inappropriate use of gloves.
- Rinse off all soap & dry hands thoroughly after hand washing.
- Report skin problems and seek advice.

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You can use the poster with the glove pyramid as a teaching tool, useful when working with a small number of people.
Gloves

• Gloves are recommended when
  – Contact with blood/body fluids, broken skin, mucous membranes, contaminated equipment can be reasonably anticipated
  – during aseptic technique (sterile gloves may be indicated)

• Gloves are not indicated
  – Where there is not a risk of coming in contact with blood/body fluids, broken skin, mucous membranes, contaminated equipment

• Correct type of glove needed
  – Single use, powder free, latex or nitrile gloves for potential contact with blood/body fluids
  – Sterile gloves for aseptic procedures
  – Household gloves for household duties
Gloves

- Protect you from contamination but are not a substitute for hand hygiene
- Must be changed between each person or between different care activities for the same person.
- Should be worn only when indicated
- Remember
  - Moment 2 - hand hygiene before applying gloves when needed for clean or aseptic procedures
  - Moment 3 - hand hygiene on removal of gloves after contact with body fluids
- Used incorrectly or inappropriately gloves can contribute to the spread of infection and lead you to missing opportunities to carry out hand hygiene
How to put on gloves (1)

1. HOW TO DON GLOVES:

1. Take out a glove from its original box
2. Touch only a restricted surface of the glove corresponding to the wrist (at the top edge of the cuff)
3. Don the first glove
How to put on gloves (2)

4. Take the second glove with the bare hand and touch only a restricted surface of glove corresponding to the wrist.

5. To avoid touching the skin of the forearm with the gloved hand, turn the external surface of the glove to be donned on the folded fingers of the gloved hand, thus permitting to glove the second hand.

6. Once gloved, hands should not touch anything else that is not defined by indications and conditions for glove use.
You might be happy to demonstrate and not use the slides

Instructions

Using one gloved hand, grasp the outside of the opposite glove near the wrist.

Pull and peel the glove away from the hand.

The glove should now be turned inside-out, with the contaminated side now on the inside.

Hold the removed glove in the opposite gloved hand.
How to Remove Gloves (2)

- Slide ungloved finger under the wrist of the remaining glove
- Peel off from inside, creating a bag for both gloves
- Discard

Instructions

Slide one or two fingers of the ungloved hand under the wrist of the remaining glove.

Peel glove off from the inside, creating a bag for both gloves.

Discard in waste container.
Go through the knowledge section of the assessment form with the learner. Agree when they are going to come back to you with the knowledge section complete at which time you will do the practical assessment.

Thank you!
How to run the practical session

Hand washing
- Demonstrate technique at the sink
- Apply glow germ and let learner demonstrate
- Use cabinet to check technique

Gloves Test
- Don gloves, apply glow germ and remove gloves
- Use cabinet to assess if hands became contaminated during removal

This slide is only as a reminder of how to use the hand inspection cabinet. Do the glove test first as this will allow people to see the glow germ clearly. Then apply more glow germ before hand washing. References are in the handouts from the study day.